

# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Addrew COMMISSIONER OF PATENTS AND TRADEMARKS P.O. Box 1450 Alexandra, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FI	LING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO	
09/783,059	(	02/14/2001	Tapani Ryhanen	297-010113-US(PAR)	9629	
2512	7590	05/27/2003				
PERMAN		N	EXAMINER			
425 POST I FAIRFIELI		24		HAM, SEUNGSOOK		
				ART UNIT	PAPER NUMBER	
				2817		

DATE MAILED: 05/27/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)	/				
•		09/783,059	RYHANEN ET AL.					
	Office Action Summary	Examiner	Art Unit					
		Seungsook Ham	2817					
Period fo	The MAILING DATE of this communication app or Reply	pears on the cover sheet	with the correspondence address					
THE N - Exter after - If the - If NO - Failui - Any r	ORTENED STATUTORY PERIOD FOR REPL MAILING DATE OF THIS COMMUNICATION. sicions of time may be available under the provisions of 37 CFR 1.1 SIX (6) MONTHS from the mailing date of this communication. period for reply specified above is less than thirty (30) days, a repl period for reply is specified above, the maximum statutory period or re to reply within the set or extended period for reply will, by statute eply received by the Office later than three months after the mailing ad patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may y within the statutory minimum of t will apply and will expire SIX (6) M e, cause the application to become	a reply be timely filed  hirty (30) days will be considered timely.  ONTHS from the mailing date of this communicati  ABANDONED (35 U.S.C. § 133).	on.				
1)⊠	Responsive to communication(s) filed on 14,	April 2003 .						
2a)□	,	is action is non-final.						
3)□	7_							
Dispositi	on of Claims		,					
4)⊠	Claim(s) 2,3,7-24,27-32 and 43-52 is/are pend	ding in the application.						
•	4a) Of the above claim(s) is/are withdra	wn from consideration.						
5)🖂	Claim(s) <u>3,18,19,21,22,43,44,48,51 and 52</u> is/are allowed.							
6)⊠	Claim(s) <u>2, 7-17, 20, 23-32, 45-47, 49, 50</u> is/are rejected.							
·	Claim(s) is/are objected to.	•						
,	Claim(s) are subject to restriction and/o	r election requirement.						
	on Papers The appeignation is objected to by the Everying							
<u> </u>	The specification is objected to by the Examine The drawing(s) filed on is/are: a)☐ acce		the Eveniner					
الالالا	Applicant may not request that any objection to the							
11) 🗀 🗆	The proposed drawing correction filed on	<del>-</del> , ,	·					
, 🗀 .	If approved, corrected drawings are required in re							
12) 🔲 🛚	The oath or declaration is objected to by the Ex							
Priority u	inder 35 U.S.C. §§ 119 and 120							
13)	Acknowledgment is made of a claim for foreign	n priority under 35 U.S.C	. § 119(a)-(d) or (f).					
a)[	☐ All b)☐ Some * c)☐ None of:							
	1. Certified copies of the priority document	s have been received.						
	2. Certified copies of the priority document	s have been received in	Application No					
	3. Copies of the certified copies of the prior application from the International Buree the attached detailed Office action for a list	reau (PCT Rule 17.2(a))	).					
_	cknowledgment is made of a claim for domesti	•		tion).				
a	) ☐ The translation of the foreign language pro Acknowledgment is made of a claim for domest	ovisional application has	been received.	,				
Attachment			39					
2) Notice	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO-1449) Paper No(s) _	5) Notice of	w Summary (PTO-413) Paper No(s) of Informal Patent Application (PTO-152)					
S. Patent and Tr	-dd							

Application/Control Number: 09/783,059

Art Unit: 2817

### **DETAILED ACTION**

## **Drawings**

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: 601, 602, 603, 605 (see claim 45) and 610 (see claim 47). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the subject matter of claims 45 and 46 (including the numerals, 601-604, 610 in conjunction with numerals 3, 7, 8) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

# Specification

The disclosure is objected to because of the following informalities:

page 18 should be deleted since the references are cited in PTO-1449;

page 2, lines 1 and 2 should be deleted;

page 7, line 26, "third" should be corrected to -six--; and

Application/Control Number: 09/783,059

Art Unit: 2817

In page 15, line 15, "first dielectric insulating layer 7", and page 16, line 2, "second dielectric layer 7", the numeral "7" defines two different elements.

Appropriate correction is required.

## Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 2, 7-17, 20, 22, 23, 28-30, 45, 46, 47, and 50 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 2, "a substrate insulating layer" is confusing as to how this layer is related to "a substrate insulating layer" recited in claim 43.

The subject matter of claim 7 is already included in claim 43.

In claim 8, "the gap" lacks antecedent basis.

In claim 9, "the air gap" lacks the antecedent basis.

Claim 10 and 11 are dependent on a cancelled claim.

In claims 12 and 13, "the capacitor electrode" is confusing as to whether it refers to a first capacitor electrode or second capacitor electrode as recited in claim 43.

In claim 15, "the conducting layer" is confusing as which conducting layer refers to (e.g., first, second or third, see claim 43); and "the capacitor and/or the second capacitor electrode" is vague and indefinite since the second capacitor electrode is a part of the capacitor.

Application/Control Number: 09/783,059

Art Unit: 2817

Claims 16 and 17 contain improper Markush group (see MPEP 2173.05(h)), and the phrase "such as" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

In claim 20, "the conducting layer" is confusing as which conducting layer refers to (e.g., first, second or third, see claim 43).

In claim 23, "the segments" lacks antecedent basis (appears to be dependent on claim 22 rather than claim 43), "the same fabrication process with capacitors and inductors" cannot be understood (examiner suggests to delete).

In claim 28, "said second capacitor electrode" lacks antecedent basis.

In claim 29, "the second capacitor electrode" lacks antecedent basis.

Claim 30 is dependent on a cancelled claim.

Claim 45 is vague and indefinite as to how first capacitor plate, second capacitor plate, a first capacitor plate, are related to each to form a capacitor. Moreover, it is unclear as to how the newly added limitation, lines 14-17 is related to the other elements recited in the claim. Furthermore, "said first capacitor electrode" (said at least one active electrode?, see fig. 3a) lacks antecedent basis.

In claim 46, "clamped points and/or sides" cannot be understood.

In claim 47, "the dielectric gap" lacks antecedent basis.

### Allowable Subject Matter

Claims 43, 3, 18, 19, 21, 22, 44, 48, 51 and 52 are allowed.

Application/Control Number: 09/783,059 Page 5

Art Unit: 2817

The following is a statement of reasons for the indication of allowable subject matter: Prior art does not show "wherein said substrate is removed up to said first capacitor electrode or up to said substrate insulating layer" as recited in claim 43, lines 22-27.

### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Seungsook Ham whose telephone number is (703) 308-4090. The examiner can normally be reached on Monday - Thursday from 8:00 A.M. to 5:00 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert J. Pascal can be reached on (703)308-4909. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9318 for regular communications and (703) 872-9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0956.

Seungsook Ham Primary Examiner Art Unit 2817

sh May 21, 2003